

Rehabilitation after Hip Surgery

One of the most critical factors in achieving successful total hip replacement depends upon your diligence in physical rehabilitation. You must actively participate in the rehab process, working diligently on your own, as well as with the physical therapists, to achieve optimal results.

Your recovery program usually begins the day after surgery. The rehabilitation team will work together to provide the care and encouragement you need during the first few days after surgery. You may be given a device called an incentive spirometer that you inhale and exhale into. It measures your lung capacity and assists you in taking deep breaths. These exercises reduce the collection of fluid in the lungs after surgery, preventing the risk of pneumonia. Coughing is an effective tool for loosening any congestion that may build in the lungs following surgery.

The physical therapists will begin as early as 1-2 days after surgery. They will teach you simple exercises that can be performed in bed to strengthen the muscles in the hip and lower extremity.

Your therapist will also teach you proper techniques to perform such simple tasks as:

Moving up and down in bed

Going from lying to sitting

Going from sitting to standing

Going from standing to sitting

Going from sitting to lying

Although these are simple activities, you must learn to do them safely so that the hip does not dislocate or suffer other injury.

Another important goal for early physical therapy is for you to learn to walk safely with an appropriate assistive device (usually a walker or crutches). Your surgeon will determine how much weight you can bear on your new hip, and the therapist will teach you the proper techniques for walking on level surfaces and stairs with the assistive device. Improper use of the assistive device raises the chance for accident or injury.

The occupational therapist will teach you how to safely perform activities of daily living, and will provide you with a list of hip precautions which are designed to protect your new hip during the first 8-12 weeks following hip surgery. The occupational therapist will also instruct you in the proper use of various long-handled devices for activities of daily living. These devices may include the following:

A reacher to dress and pick things up from the floor

A sock-aid to assist in putting on socks

A long-handled sponge to wash your legs and feet

A leg-lifting device to move the operated leg in and out of the car or bed

An elevated toilet seat so that you don't violate your hip precautions when using the bathroom

An elevated bathtub chair to fit in the shower or tub

The precautions following hip replacement surgery must be strictly adhered to in order to prevent dislocation of the hip implant and the possibility of another operation.

At Home

Following surgery, a physical therapist may help you with your rehabilitation protocol. In addition to the exercises done with the therapist, you should continue to work on the hip exercises in your free time. It is also important to continue to walk on a regularly basis to further strengthen your hip muscles. An exercise and walking program helps to enhance your recovery from surgery and helps make activities of daily living easier to manage.

You may be asked to perform a variety of exercises, including leg lefts, ankle pumps, quadricep sets, gluteal sets, hip abduction, and knee extensions. If an exercise causes lasting pain, reduce the number of repetitions. If the pain continues, contact your physical therapist or physician.

While at home, continue to walk with an assistive device unless directed by your surgeon to discontinue use. You must also remember to strictly follow the hip precautions and weight-bearing instructions during the first few months following surgery. It is recommended that you not drive unless you have been approved by your doctor.

Long-term Rehabilitation Goals

Once you have completed your rehabilitation program, you can expect to be able to perform most activities of daily living with little to no hip pain or assistance. Following total hip replacement, patients routinely are able to walk, dress, bathe, drive, garden, cook, and return to work. Although final outcomes may vary from patient to patient, hip replacement surgery is one of the most successful procedures in modern medicine and most patients return to a full and active life.

Why are exercises important?

Due to limited movement after the operation, you will have to work hard to regain muscle power and mobility.

It is very important to do the exercises your physiotherapist teaches you, so you get the most out of your new hip. Once you understand how to do the exercises, you will be encouraged to do them on your own.

First Exercises

Before being allowed to get out of bed for the first time, it is important to do the following exercises **every hour**. These will help prevent complications.

- 1. Take 3-4 deep breaths
- 2. Move your feet vigorously up and down
- 3. Tighten up thigh and buttock muscles and hold few seconds repeat 10 times

Ankle Pumps

Slowly push your foot up and down. Do this exercise several times as often as every 5 or 10 minutes. This exercise can begin immediately after surgery and continue until you are fully recovered.



Ankle Rotations

Move your ankle inward toward your other foot and then outward away from your other foot.

Repeat 5 times in each direction 3 or 4 times a day.



Bed-Supported Knee Bends

Slide your heel toward your buttocks, bending your knee and keeping your heel on the bed. Do not let your knee roll inward.

Repeat 10 times 3 or 4 times a day



Buttock Contractions

Tighten buttock muscles and hold to a count of 5.

Repeat 10 times 3 or 4 times a day



Abduction Exercise

Slide your leg out to the side as far as you can and then back.

Repeat 10 times 3 or 4 times a day



Quadriceps Set

Tighten your thigh muscle. Try to straighten your knee. Hold for 5 to 10 seconds.

Repeat this exercise 10 times during a 10-minute period.

Continue until your thigh feels fatigued.



Straight Leg Raises

Tighten your thigh muscle with your knee fully straightened on the bed. As your thigh muscle tightens, lift your leg several inches off the bed. Hold for 5 to 10 seconds. Slowly lower.

Repeat until your thigh feels fatigued.



Standing Exercises

Soon after your surgery, you will be out of bed and able to stand. You will require help since you may become dizzy the first several times you stand. As you regain your strength, you will be able to stand independently. While doing these standing exercises, make sure you are holding on to a firm surface such as a bar attached to your bed or a wall.

Standing Knee Raises

Lift your operated leg toward your chest. Do not lift your knee higher than your waist. Hold for 2 or 3 counts and put your leg down.

Repeat 10 times 3 or 4 times a day



Standing Hip Abduction

Be sure your hip, knee and foot are pointing straight forward. Keep your body straight. With your knee straight, lift your leg out to the side. Slowly lower your leg so your foot is back on the floor.

Repeat 10 times 3 or 4 times a day



Standing Hip Extensions

Lift your operated leg backward slowly. Try to keep your back straight. Hold for 2 or 3 counts. Return your foot to the floor.

Repeat 10 times 3 or 4 times a day



Walking and Early Activity

Soon after surgery, you will begin to walk short distances in your hospital room and perform light everyday activities. This early activity helps your recovery by helping your hip muscles regain strength and movement.

Walking with Walker, Full Weight bearing

Stand comfortably and erect with your weight evenly balanced on your walker or crutches. Move your walker or crutches forward a short distance. Then move forward, lifting your operated leg so that the heel of your foot will touch the floor first. As you move, your knee and ankle will bend and your entire foot will rest evenly on the floor. As you complete the step allow your toe to lift off the floor. Move the walker again and your knee and hip will again reach forward for your next step. Remember, touch your heel first, then flatten your foot, then lift your toes off the floor. Try to walk as smoothly as you can. Don't hurry. As your muscle strength and endurance improve, you may spend more time walking. Gradually, you will put more and more weight on your leg.

Walking with Cane or Crutch

A walker is often used for the first several weeks to help your balance and to avoid falls. A cane or a crutch is then used for several more weeks until your full strength and balance skills have returned. Use the cane or crutch in the hand opposite the operated hip. You are ready to use a cane or single crutch when you can stand and balance without your walker, when your weight is placed fully on both feet, and when you are no longer leaning on your hands while using your walker.

Stair Climbing and Descending



The ability to go up and down stairs requires both flexibility and strength. At first, you will need a handrail for support and you will only be able to go one step at a time. Always lead up the stairs with your good leg and down the stairs with your operated leg. Remember, "Up with the good" and "down with the bad." You may want to have someone help you until you have regained most of your strength and mobility. Stair climbing is an excellent strengthening and endurance activity. Do not try to climb steps higher than those of the standard height of seven inches and always use the handrail for balance.

Advanced Exercises and Activities

A full recovery will take many months. The pains from your problem hip before your surgery and the pain and swelling after surgery have weakened your hip muscles. The following exercises and activities will help your hip muscles recover fully.

These exercises should be done in 10 repetitions four times a day with one end of the tubing around the ankle of your operated leg and the opposite end of the tubing attached to a stationary object such as a locked door or heavy furniture. Hold on to a chair or bar for balance

Elastic Tube Exercises

Resistive Hip Flexion

Stand with your feet slightly apart. Bring your operated leg forward keeping the knee straight. Allow your leg to return to its previous position.



Resistive Hip Abduction

Stand sideways from the door and extend your operated leg out to the side. Allow your leg to return to its previous position.



Resistive Hip Extensions

Face the door or heavy object to which the tubing is attached and pull your leg straight back. Allow your leg to return to its previous position.



Exercycling

Exercycling is an excellent activity to help you regain muscle strength and hip mobility. Adjust the seat height so that the bottom of your foot just touches the pedal with your knee almost straight. Pedal backwards at first. Pedal forward only after comfortable cycling motion is possible backwards. As you become stronger (at about 4 to 6 weeks) slowly increase the tension on the Exercycle. Exercycle forward 10 to 15 minutes twice a day, gradually building up to 20 to 30 minutes 3 to 4 times a week.

Walking

Take a cane with you until you have regained your balance skills. In the beginning, walk 5 or 10 minutes 3 or 4 times a day. As your strength and endurance improves, you can walk for 20 or 30 minutes 2 or 3 times a day. Once you have fully recovered, regular walks, 20 or 30 minutes 3 or 4 times a week, will help maintain your strength.

